



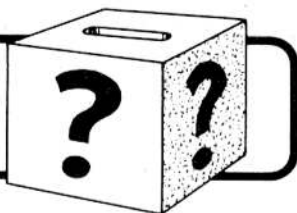
# NUCLEAR DIVISION NEWS

*A Newspaper for Employees of the Nuclear Division, Union Carbide Corporation*

Vol. 4—No. 13

July 5, 1973

## QUESTION BOX



*If you have questions on company policies, benefits, etc. or any other problems with which we might help, just let us know. Drop your inquiry to the Editor, Nuclear Division News. (Or telephone it in to your plant news representative . . . see page two). You may or may not sign your name. It will not be used in the paper if you so desire.*

*Questions are referred to the proper authorities for accurate answers. Each query is given serious consideration for publication.*

*Answers may be given to employees personally if they so desire.*

**QUESTION:** Some years ago when the Pension Plan came on the scene, many dropped the Retirement Plan. Should the Retirement Plan have been dropped then and why? Should it be dropped now and why?

What were the differences between the two plans then? Have they changed?

What do insurance statistics indicate the total benefits that will be received from the two plans? i.e., similar service, similar retirement life, with wife, etc.

**ANSWER:** The Contributory Retirement Plan was an excellent one when it was introduced in 1937. The introduction of the Pension Plan in 1950 and its subsequent improvements in 1957, 1962, 1965, 1969, and 1973 have made Union Carbide Corporation's total retirement program more attractive, but at the same time have made the Contributory Retirement Plan itself less attractive. Employees have recognized this and as a result only 1,734 of the approximately 15,000 employees in the Nuclear Division were still in the Contributory Retirement Plan on December 31, 1972. This was less than 12%. This compares with 7,563 employees in 1960, which was more than 50% participation. Participation in the Contributory Retirement Plan is restricted to those who had enrolled prior to June 30, 1969, and who are still in the Plan. The Plan will terminate when all current participants retire.

It is not possible to answer your numerous questions in this column due to space limitations. We would suggest that you review your particular case with your Benefit Plans representative. He will give you comparative figures under various circumstances so that you may make intelligent decision concerning Contributory Retirement Plan participation.

**QUESTION:** Due to the large number of employees now taking five weeks vacation and soon will be taking six weeks, we would like to suggest that employees with more than 25 years' company service credit be allowed to accumulate more than six weeks carry-over vacation. A stipulation could be made that no more than 10 or 12 weeks could be taken in any one year except on retirement or termination.

**ANSWER:** An employee with 25 or more years of company service credit may carry forward to a succeeding year up to two weeks of his current year vacation. The maximum amount of carried forward vacation which an employee may have to his credit at any time shall be six weeks. Also, the maximum vacation taken in any calendar year shall be 12 weeks. This company policy has been in effect for some time and there is no present plan to change.

**QUESTION:** Does Union Carbide Nuclear Division match gifts made by employees to college and universities? If so, what steps must an employee take to have such gifts matched?

**ANSWER:** Union Carbide Nuclear Division does not have a program of matching gifts made by an employee to colleges and universities.

## Nemzek will direct AEC's RRD division

Thomas A. Nemzek, Manager of the Atomic Energy Commission's Richland (Washington) Operations Office, will succeed Milton Shaw as Director of the Division of Reactor Research and Development.

Nemzek has long been associated with nuclear reactor development programs including those primarily directed toward fast breeder reactor technology. Before his appointment as manager of the Richland Operations Office, Nemzek was assistant director for Pacific Northwest Programs for the AEC's Reactor Development and Technology Division. He served earlier as deputy manager of the San Francisco Operations Office, and as assistant manager for Technical Operations at the Chicago Operations Office.

A native of Fargo, N.D., Nemzek is a graduate of the U.S. Naval Academy and holds a master's degree in nuclear engineering from North Carolina State University. He is also a graduate of the Federal Executive Institute.

## Nuclear Division employees receive \$22.7 million savings

A cash distribution of more than \$22.7 million has been made to employees at the four Union Carbide facilities in Oak Ridge and Paducah.

The money was distributed to 12,173 participants in Union Carbide's Savings Plan. Every two years, participants in the Savings Plan receive the money they have saved, plus a Company contribution, plus interest. Nationwide this year, the payout to some 50,800 participating Union Carbide employees totals \$88 million -- \$66 million in savings, \$15 million in Company contributions, and \$7 million in earned interest.

In past years, employees participating in the Savings Plan could authorize payroll deductions up to seven and one-half percent of their earnings to a maximum

of \$83 per month. Effective July 1, 1973, the \$83 limitation has been removed. The Company contributes 10, 20, or 30 percent of this amount, depending on whether the employee has one, two, or three or more years of Company service.

Union Carbide employees living in Oak Ridge received approximately \$7.7 million this year. Other employees in Anderson County received about \$1.4 million. Distributions to other areas included: Knox County employees, \$4.2 million; Roane County, \$2.7 million; and Loudon County, \$925,000. An additional \$3.8 million was received by employees living in other areas in Tennessee.

Employees at the Paducah Gaseous Diffusion Plant received approximately \$1.8 million.

## 'What was on my check?'

Employees in the General Savings Fund of Union Carbide's Savings Plan may ask, "Just what did my check include in the recent payout?"

Each participant received the following in his check:

1. His savings for the period July 1, 1971 through June 30, 1973.
2. Interest on his 1971-1973 savings.
3. Interest on the 1971-1973 Company contribution to his account. (The Company contribution for this period -- as required by the U.S. Treasury Department regulations -- is in a deferred account for payout in 1975).
4. The Company contribution to his account for the period July 1, 1969 through June 30, 1971.
5. Interest on the 1969-1971 Company contribution.
6. His share of the fund surplus for 1969-1971.

To assist participants in keeping financial records, the check stubs showed: the amount saved by the individual; the amount paid from his deferred account (1969-1971 Company contribution plus fund surplus); the total interest paid; and the amount being held in his deferred account (1971-1973 Company contribution plus fund surplus).



**OFF TO WASHINGTON** — Merle W. Fowler III, son of Dr. and Mrs. Merle W. Fowler, Paducah, is presented travel arrangements by Clyde C. Hopkins, Paducah Plant Superintendent, right. Fowler, an outstanding student in political science at Tilghman High School, will attend Union Carbide's Congressional Seminar in the nation's capitol, visiting with congressmen, senators, cabinet members and other governmental officials.



# Component reliability data now available through GIDEP

The Nuclear Division is participating in a data exchange program that offers immediate information on the reliability of components of electronic instruments.

An interservice data exchange program (IDEP) was started in the armed services in the mid-1960's to eliminate duplication of reliability tests on weapons components. The program is now expanded to include participation by government contractors and private industry. It has been renamed the Government-Industry Data Exchange Program (GIDEP).

## Requirement for participation

GIDEP is administered by the Naval Material Command. Users of electronic instrumentation may participate without charge, but are required to submit 20 pertinent reports a year to the data bank in order to qualify for GIDEP's services.

Services offered by GIDEP include access to thousands of technical reports on evaluation, materials quality or performance, and specifically named instrumentation or electronics systems. Approximately 1800 such reports come into the program each year, and are fed onto microfilm reels for distribution to participants. A list of calibration procedures is also available.

## Coordinator of program

Janice Blanton, head of the Y-12 Technical Library, coordinates this program for the Nuclear Division installations in Oak Ridge. The reports are received on microfilm each month. Mrs. Blanton compiles summary sheets listing the contents of each film reel, and the sheets are distributed to interested groups or individuals by plant representatives. These representatives are: ORNL, C.S. Lissner, Instrumentation and Controls Division; Y-12, Hilton Tunnell, Fabrication Division; and ORGDP, John W. Arendt, Laboratory Division.

Mrs. Blanton, with the help of one or more technical staff members, must also select the 20 reports to be submitted to GIDEP as the Division's membership qualification. The selection is made from

a list of approximately 2500 reports published within the Nuclear Division each year. The reports must be converted into the necessary coded form for entry into GIDEP's computer, and then dispatched to the central administration office where technical processing is completed for establishing them in the data bank.

## Reports available

The microfilm reels are kept in the library at Y-12, but hard copies of selected reports will be produced upon request. There are more than 35,000 technical reports and a collection of 15,000 calibration procedures now on file. These are available for almost every kind of laboratory equipment.

The goal of GIDEP remains today what it started out to be: cost avoidance through the elimination of duplicated effort. But where the original effort was aimed at defense and space program spending, the program has now been extended to include contractors for other government agencies, and instrumentation users in private industry. About 300 contractor, agency, and private corporations are now participating members in GIDEP.

## Hopefully, more usage

Interorganizational information exchange has not as yet caught on here to the extent that was anticipated. Relative-

## Division Retirees



Bass

Mrs. Hicks

Alexander P. Bass has retired as a utilities foreman in the Plant and Equipment Division. Bass worked for the Duke Power Company and at TVA before joining the ORNL staff in 1944. In his spare time he enjoys traveling, fishing and hunting. Bass is very proud of his attendance record - he has been absent only one work day during his 28-plus years with the company. His son, Paul Jr., works at Y-12, and his daughter, Ruby, works in the Isotopes Division at ORNL.

Florence S. Hicks worked in the Receiving Department of the Plant and Equipment Division. She came to work for Monsanto in 1947. Mrs. Hicks' plans include visiting her daughter in Rochester, N.Y., gardening and taking a few courses. Her son, Vance McKinney, works in the Glass Shop at ORNL.

Arthur F. Rupp has retired from the Directors Division. The Rupp home is at 113 Outer Drive, Oak Ridge.



GIDEP — Janice Blanton, coordinator of the Government-Industry Data Exchange Program for the Nuclear Division, holds a microfilm reel which contains information on reliability of components of electronic instruments. The machine in the background is a microfilm reader-printer.

ly few full reports have been requested so far, but those that have been used have represented measurable savings in effort duplication and resultant cost. Because of its origin, the great majority of GIDEP's reports as yet relate to the parts, components, and materials of military and space systems. But with the growing input from private industry, this inventory is broadening. Fuller usage, which will be of inevitable benefit to all participants, is expected.

An emergency service is offered by the program, also, whereby urgent data requests may be sent out to all participants for specific answers to problems encountered with identified instruments. And, reciprocally, participants may issue an alert to the discovered failure of some piece of equipment on the open market. These documents are sent out as the occasion rises, and when Mrs. Blanton receives them she distributes them to the three plant representatives.

## NUCLEAR DIVISION NEWS

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## Y-12er Beasley named to high labor post

George R. Beasley, a stationary engineer in Y-12's Utilities, has been named assistant commissioner of labor for the state of Tennessee.

Beasley, financial secretary and treasurer of the Atomic Trades and Labor Council, is a native of Old Hickory. He has been at Y-12 20 years, after serving in the U.S. Army during the Korean War. He is taking a leave of absence for the 18-month's appointment.

Labor Commissioner Ben Gibbs stated that Beasley was chosen because it was felt he was "an outstanding person in his field of labor and that he, in general, is a very outstanding citizen."

Beasley's responsibilities will entail general administrative assistance to the commissioner, involving work in boiler safety, elevator safety, private employment, child labor laws, wage and hour laws, workmen's compensation, mine safety, occupational safety, and the prevailing wage.

Mrs. Beasley is the former Katherine Tomlinson, and they live at 808 Hidden

## ATLC accepts wage increases in vote

Members of the Atomic Trades and Labor Council, representing some 4,200 employees at Y-12 and Oak Ridge National Laboratory, voted recently to accept wage increases offered by the Nuclear Division.

The three-year contract was signed a year ago, and allowed for "wage reopener" negotiations this year and next.

Under the new agreement, craft workers will get 33 cents an hour increase; operators 27 cents; and laborers 21 cents.

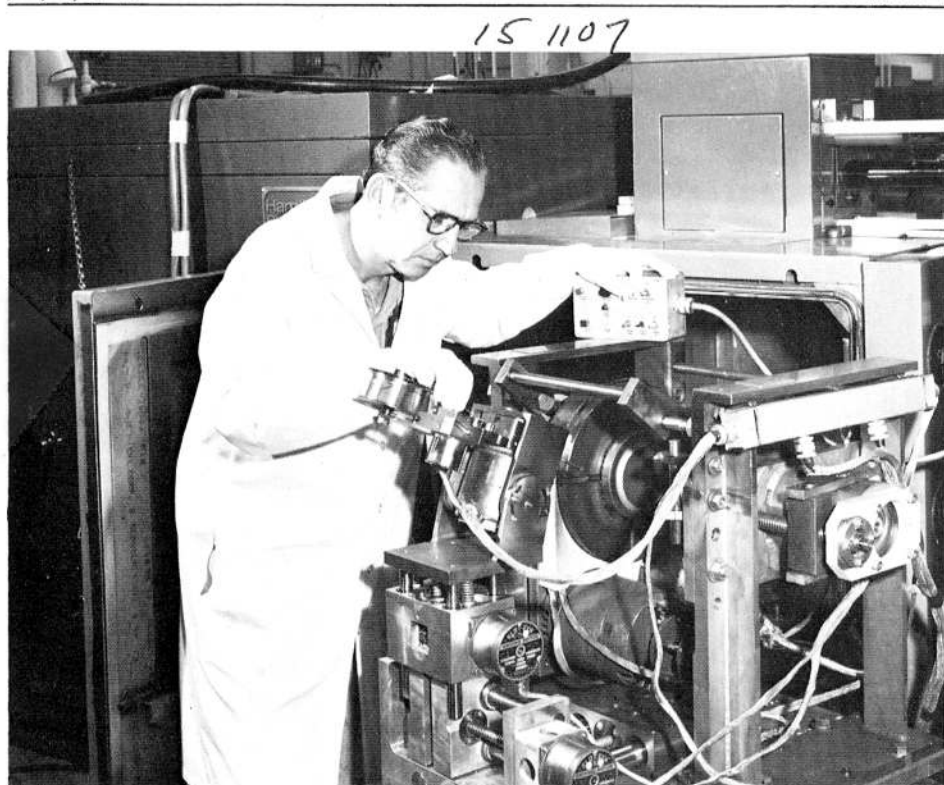
The ATLC is made up of 17 unions, representing hourly roll personnel in both Y-12 and ORNL.

Valley Road, Knoxville. She is a nurse at the Oak Ridge Hospital. The couple has one son.

In commenting on Governor Winfield Dunn's appointment, Y-12er Jerry George pointed out that Beasley was the first Y-12er to be appointed to such a high post in state government.

"I am truly honored," Beasley stated, "and I will devote my full energy and ability in promoting an atmosphere of understanding and cooperation between government and labor that is essential for the advancement of the interests of the working people of our state."





**ELECTRON-BEAM WELDING** — Billy G. Cross, Metallurgical Development in Y-12, checks the filler-wire feeder and positioner system developed for electron-beam welding operations. The system was developed by Jimmy L. Murphy, Metallurgical Development Department, with assistance from mechanical and electrical engineers.

## Improved electron beam weld application developed

Engineers at the Oak Ridge Y-12 Plant have developed an improved filler-wire feeder and positioner for electron beam welding applications.

The filler-wire feeder can accommodate as many as nine individual weld passes and is programmed by the use of dial switches. The positioner has three axes of movement, each of which can be controlled from the exterior of the vacuum chamber of the electron beam welder. These axes of movement are used to locate precisely the wire feed nozzle in relation to the weld joint groove, and to raise or lower the nozzle between weld passes.

The equipment has been utilized to make fully penetrated multipass welds on

precision joints of aluminum, uranium, and stainless steels. It was developed because commercially available wire feeders were not suitable for electron-beam welding within a vacuum chamber.

### FORMER Y-12ER

Everett E. Ramsey, former employee in Y-12's Building, Grounds and Maintenance Shops, died June 22 at his Oak Ridge home. He retired in 1960, after working in the Oak Ridge area more than 23 years. Survivors include his wife and three sons, including William Ramsey, Dispatching in Y-12. Funeral services were held at Martin Funeral Home with burial in Oak Ridge Memorial Park.

## Union Carbide--AEC ink new five-year contract

The Atomic Energy Commission has extended for a period of five years a contract with Union Carbide Corporation for the operation of the Oak Ridge Gaseous Diffusion Plant, the Oak Ridge Y-12 Plant, the Oak Ridge National Laboratory, and the Paducah Gaseous Diffusion Plant.

Robert J. Hart, manager of the AEC, Oak Ridge Operations, said the old three-year contract which expired June 30, 1973, has been extended through September 30, 1978. Union Carbide has been a major operating contractor for the AEC and its predecessor organization, the Army's Manhattan Engineer District, since 1943.

The facilities represent a Federal investment of approximately two and one-half billion dollars. More than 14,000 persons are employed at the plants and laboratories. Current annual operating costs are about \$400 million.

The Oak Ridge Gaseous Diffusion Plant, with a current employment of some 2,500, and the Paducah Gaseous Diffusion Plant, employing some 1,300 persons, are both engaged in the production of enriched uranium (U-235) for the nuclear power industry.

As a result of the world-wide growth of nuclear power, the two plants (along with a sister facility operated by Good-

year Atomic Corporation at Portsmouth, Ohio) are heavily involved in programs to expand plant production capacity to match growing demands for U-235.

Union Carbide's Nuclear Division is also engaged in the AEC's program to develop gas centrifuge technology as an alternative method of uranium enrichment. The Nuclear Division is also assisting the AEC in its current program to provide private industry access to uranium enrichment technology to enable industry to possibly enter the uranium enrichment business in the future.

Oak Ridge National Laboratory, currently employing some 4,100 persons, has been operated by Union Carbide since 1948. The programs of ORNL are wide-ranging in the overall development of atomic energy for beneficial applications, and include work in the fields of nuclear reactor development, fusion research, biology, ecology and the environment, and radioactive waste disposal. In addition to its work for the AEC, ORNL also conducts basic and applied research for other Government agencies through interagency agreements with the AEC. These agencies have included the National Science Foundation, the National Aeronautics and Space Administration, and the Department of Health, Education and Welfare (National Institutes of Health).

The Y-12 Plant, employing approximately 6,100 persons, is involved primarily in engineering and production activities related to national defense. Operated by Union Carbide since 1947, Y-12 also provides support work for the research programs of ORNL and for other agencies.

### Next Issue

The next issue will be dated July 19. The deadline is July 11.

## Many challenging tasks

Following is a statement by Roger F. Hibbs, President of the Nuclear Division, Union Carbide Corporation, concerning the five-year extension of its contract to operate four facilities for the U. S. Atomic Energy Commission.

"Union Carbide Corporation is pleased to continue its responsibilities as manager of four major installations for the United States Government.

"During the next five years, these installations will face many challenging tasks, all of which are extremely important to the well being of our nation.

"The gaseous diffusion plants already are working on programs which are vital in meeting our energy needs. The Oak Ridge National Laboratory is working in many critical areas, such as the biological and ecological sciences and the controlled fusion program. And the Y-12 Plant continues to have key responsibilities in the area of national defense.

"Union Carbide Corporation has been active in the nation's nuclear energy program for more than 30 years. The Corporation is proud of the many significant contributions its employees have made in the past, and is confident that equally meaningful contributions will be made in the years ahead."



**TWICE A HISTORIC LANDMARK** — The Oak Ridge Graphite Reactor at ORNL was dedicated an American Society for Metals National Historic Landmark recently. This is the second time the reactor has received such an honor - in 1966 it was designated a Registered National Historic Landmark by the National Park Service. Present at the ceremony were, from left, Congressman Elwood Hillis, Indiana; William D. Manly, president, American Society for Metals; Paul R. Vanstrum, UCND; Ray C. Armstrong, AEC-ORO; and Richard L. Philippone, chairman of Oak Ridge Chapter, ASM. At right, Manly presents the official recognition to the AEC's Armstrong.



# ORNL safety award drawing held recently

1441-73



AROUND IT GOES — Assisting in the drawing for safety awards at ORNL are, from left, Jeanne Carver, Bill Woods, Denton Gary and H. Fritz McDuffie. McDuffie was chairman of the Awards Committee. Winners of four of the top five prizes are shown on the right. They are from left, James Stiegler, microwave oven; Albert Wiseman, color television set; Charles Golden, 'touch and sew' sewing machine; and Hazel Duggan, set of four radial tires.

Oak Ridge National Laboratory has joined Paducah and Y-12 in exceeding its number of required days without a loss time injury under the new safety incentive program.

The 120-day period required for ORNL was reached April 10. A total of 107 items were awarded at a drawing held June 20. The big winners included: Rodney J. Davis and Albert A. Wiseman, color television sets; James O. Stiegler, microwave oven; Charles A. Golden, sewing machine; Hazel C. Duggan, four radial tires; Harris W. Dunn, movie outfit; Frank G. Kilpatrick, rotospader; Emine W. Rosenbaum, portable typewriter; Francis M. Rau, chain saw; and Clarence K. Thomas, lawn mower.

Other winners included: Gwen C. Wicker, Richard Rowe, Coleman Cole, Susan Pierce, Bernard J. Hannifin, Jake R. Pesterfield, Jerred J. Smith, Paul E.

Murphy, Rita J. Allen, Jack C. Love, Robert W. Holmberg, Robert W. Peelle, Stephen J. Ditto Jr., John A. Rucker, Janet M. Shaver, James H. Shaffer and Sloan Lambdin.

Howard E. Lee Jr., Russell D. Westbrook, S.C. Lindsay, William T. McDuffie Jr., William L. Marshall Jr., Grady W. Clark, Blaine E. Dinger, James A. Fields Jr., Charley F. Mounger, Richard E. Pawel, Hal Williams, J.B. Ogle, James M. Huffman, Robert E. Minturn, Jess Burden, Walter D. Bond, Chester W. Marcum, Jere P. Nichols, James L. Ping, Chester L. Oxford and O. Lucille Kuykendall.

Robert L. Spore, Edgar W. Brown, Albert H. Gregory, Roy V. McKeethan, Hobard Keating, Malcolm B. Brister, J.M. Robbins, Karl W. Haff, Samuel N. Cramer, James S. Billingsley, Elmer H. Lee, George C. Warlick Jr., Jesse E. Hair

Jr., James C. Mailen, A. Seaton Garrett Jr., William H. Sides Jr., John H. Brock, Gary H. Coleman, Thurman L. Miller and Robert D. Scofield.

Samuel L. Flippen Jr., Phillip P. Williams, Kenneth E. Kirksey, William P. Smith, Alice D. Richardson, David M. Galbraith, Wilborn Borum, Byon M. Lamb, Carl L. Fox, John W. Huckabee, Ruby J. Shelton, Richard B. Gammage, Hugo W. Bertini, Paul W. Hill, Russell S. Jackson, Leo J. Brady, R.L. Pritchard, Charles R. Kennedy, Charles E. Murphy, Mary V. Jimmerson, Joyce L. Beeler, James T. Cox, Frederick G. Goff, Robert W. Manweiler and James M. Shoopman.

Roy W. Webber, Rodney H. Strand, Elijah F. Harness, Jack Campbell, James R. Thomas, Everett Beakham, Raymond K. Adams, Thomas D. Owings Jr., Gray S. Henderson, Normal C. Bradley, John A. Stockdale, John W. Shuey, Phillip H. McCulley and Raymond E. Callahan.

## Division Retirees

### Y-12 PLANT

Four additional Y-12ers chose early retirement recently. Theo Renner, Buildings, Grounds and Maintenance Shops, came to Y-12 in 1943. He lives at Oliver Springs.

Audley L. Sawyer, locksmith in Electrical and Electronics, came here in 1951. He lives at 3609 Reagan Drive, Knoxville.

Denson Lay lives at 103 Oakland, Clinton. He joined Union Carbide in 1951.

Solon A. Peters, Beta Two Assembly, lives at 1902 Merchants Road, Knoxville. He came to Y-12 in 1949.



Lay

Two ORGDP veterans will retire at the end of July, ending long Union Carbide careers.

Cecle H. Seeber, in Fabrication and Maintenance's Garage, lives at Oliver Springs. He joined Union Carbide in 1944.

Ewell T. Hayworth, an electrical mechanic, came to ORGDP in March, 1945. He retires to his 4307 Central Avenue Pike, Knoxville, home.



Seeber

Hayworth

## COMPANY Service

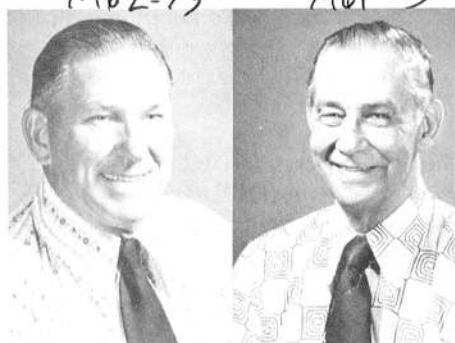
20 25 30

### ORNL

30 YEARS

1462-73

1461-73



Childress

Robinson

William E. Childress is a native of the East Tennessee area. He is presently a labor foreman in the Operations Divisions. Childress is in the minority in his family - he has two daughters and two granddaughters. He and Ruth, his wife, live at Route 2, Powell. Childress enjoys boating and fishing in his spare time.

John A. Robinson is a machine and shop foreman in the Plant and Equipment Division. Robinson came to work for TVA from Tulsa, Okla. He later joined DuPont and worked with the first hot-cells group at the Laboratory. Robinson has three children - his youngest son, Mike, is a senior at The University of Tennessee. His hobbies are hunting and fishing. Robinson and wife, Eula, who is a

nurse at Oak Ridge Hospital, live at 110 Victoria Road, Oak Ridge.

### 25 YEARS

Cecil R. Henline, Everett G. Richardson, Louie C. Henley, Robert L. Cauble, Frank A. Kocur, William H. Farmer, John M. Guinn Jr., Charlie F. Coleman, Richard B. Gallaher Sr., Frank A. Sherrill, Grace B. Desimone, M.R. 'Bob' Bennett, David J. Crouse Jr., Elsie H. Pickell, Robert M. Farnham, John D. Blanton and James H. Pittman.

### 20 YEARS

E. Lloyd Youngblood Jr., Jean W. Bangham, G. Marion Argo, Richard D. Cheverton, William N. Drewery Jr., Norman H. Lazar, Lendel G. Farrar, Estel Westmoreland, James M. Shoopman, Walter E. Clark and James T. White.

### PADUCAH 30 YEARS

Harry S. Weglicki, Operations Shift Superintendent at Paducah, hired in at the SAM Laboratories in July, 1943. He holds a B.S. degree from Niagara University.

Transferring to Paducah in 1941 from ORGDP, Weglicki lives there with his wife Irene and sons, Michael and John; and daughter, Elizabeth Ann, at 133 Mimosa Lane.



Weglicki

### 25 YEARS

Paris E. Wylie.

### 20 YEARS

Leslie B. Batts.

### ORGDP 25 YEARS

Charlie A. Culpepper, Bernhardt L. Geldmeier Jr., Fred Kanipe, Alvin J. Joiner, Bill B. French and John A. Cochran.

Martin J. Skinner.

### 20 YEARS

Mendle M. Phillips, Chester A. Culvanhouse Jr., and Annamae Jeri Kobisk. Anna B. Ward.

### THE LAST WORD

Letting things go in one ear and out the other is bad enough; but it's worse when things go in one ear, get all mixed up, then come out of the mouth.

## Foreign travel

Leon O. Love, superintendent of the Electromagnetic Isotope Separations Department at ORNL, attended the Eighth International Electromagnetic Isotope Separator Conference, Billingshus, Sweden, June 12-15. He was a member of the International Organizing Committee of the conference, and presented two papers, "Recent Developments in the ORNL Program," and "Process Efficiencies in Calutron Separations."

Charles C. Congdon, Biology Division, will attend meetings of the Cooperative Group on Bone Marrow Transplantation in Man of the International Society for Experimental Hematology and the European Organization for Research on Treatment of Cancer, June 25-30, in Paris, France.

Robert W. Hendricks, Metals and Ceramics Division, is on a one-year exchange assignment at the Institut fur Feskorperforschung der Kernforschungsanlage, Julich, West Germany.





**GRADUATES** — Participants of the Basic Education Improvement Program who received their high school equivalency certificates are shown with the teachers and administrators of the program. Seated, from left are: John Cornelius, Hazel C. Duggan, Alma J. Soard, Rose Robbins, (teacher), Constance Anthony (teacher), William R. Blocker and Charles E. Thacker. Standing, from left are: T. H. Freeman (coordinator of BEIP), Aaron Foust, Gene G. Potts, Norman G. Allmon, Walter C. Elkins, Paul M. Nelson, Alvin L. Bradley, James D. Johnson, L. B. Mullins and B.G. Catron (director of BEIP).

## High school diplomas attained through BEIP

The Personnel Development and Systems Department of the Personnel Division at Oak Ridge National Laboratory recently held a special program to recognize employees who have participated in the Basic Education Improvement Program since last October. Certificates were awarded to 38 employees from five divisions.

In 1947, ORNL began its program to encourage and assist employees with less than a high school education to obtain a high school diploma or pass the high school equivalency test. (The High School Equivalency Certificate is considered to be equal to a high school diploma.) Individual counseling was provided and employees were given study assignments to be completed on their own time. Form "B" of the USAFI-GED test was administered to employees during normal work hours. From 1947 to 1967, 230 employees took the test and 154 passed it.

### Classroom training offered

In 1967, this program was expanded to offer formal classroom training in subjects covered by the GED examination. Classes are now offered for a 30-week period each academic year, with each student attending class two hours each week during his regular work schedule.

From 1967 through 1972, 42 employees received their high school education certificates. During the 1972-73 school term, 14 employees received their high school equivalency certificates. They are Willie T. Petty, Biology Division; Alma J. Soard, Health Physics Division; Norman G. Allmon, Hazel C. Duggan, Aaron Foust and Gene G. Potts, Information Division; William R. Blocker, Alvin L. Bradley, John E. Cornelius, Walter C. Elkins and Paul M. Nelson, Operations Division; and James D. Johnson, L.B. Mullins and Charles E. Thacker, Plant and Equipment Division.

### Certificates awarded

Certificates for the successful completion of from one to five years in the

program were awarded to Thelma M. Carter, Nathan B. Carr, Jessie Inman, Forrest E. Palmer, Audrey M. Smith, Boss Davidson, Hugh G. Hackler, J.C. Grove, Paul L. Jude, Roy E. Braden, Coy L. Bunch, Willie Oggs, George Reed, Floyd R. Wells, Hugh Binkley, Lindsey Dowdell, Elijah F. Harness, Richard Jones, Jessie M. Luckett, Lyman A. Robinson, Charles W. Parks, Rudie L. Patterson, Leroy West and Hal Williams.

The Basic Education Improvement Program is directed by B.G. Catron and coordinated by T.H. Freeman. Classroom teachers, provided in cooperation with the Oak Ridge Adult Education Program, are Mrs. Constance Anthony and Mrs. Rose Robbins.



**ACTIVE IN RETIREMENT** — Lamar Anthony, who retired from the Y-12 Plant in 1967, busies himself with woodcarving. He recently had a huge display at the Suburbia Junior Woman's Club Annual Arts and Crafts Festival in Lenoir City. He "piddled around" with woodcarving until his retirement, and now he takes his art seriously. He recently began carving dulcimers.

## Armstrong, Case, Whalen and Williams promoted at Paducah

Four recent promotions are announced at the Paducah Gaseous Diffusion Plant, in the Fabrication and Maintenance Division.

John D. Armstrong has been named an electrical maintenance foreman. He joined the Division in 1952 after military service during World War II, and employment with the Huntington and Guerry Electric Co., Greenville, S.C.

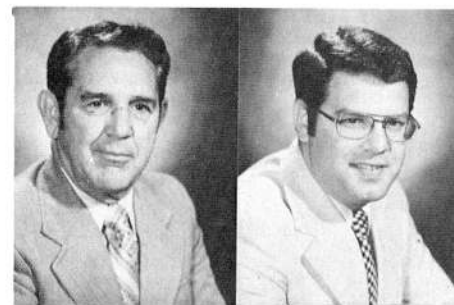
Armstrong lives at 381 High Street, Paducah, with his wife, Elaine.

Lawrence M. Case, a native Oak Ridger, recently transferred to Paducah, and has been named a process maintenance foreman. He joined Union Carbide at ORGDP, and worked at Oak Ridge Associated Universities prior to that time.

Case holds a B.S. degree from Transylvania University and an M.S. from The University of Tennessee.

He and his wife, Marilyn and daughter, Stacey, are in the process of moving to Paducah.

William P. Whalen is elevated to an electrical maintenance foreman. A native of Grand Rivers, Ky., he began his Union Carbide career in 1953, after working with F. M. McGraw Construction. He left on military leave during the early 60's.



Armstrong

Case



Whalen

Williams

Whalen lives at 840 North 23rd Street, Paducah.

Solon T. Williams has been named a fabrication foreman in F&M Division.

A native of Paducah, Williams joined Union Carbide in 1952. He studied at the Bailey Diesel School, St. Louis, after graduating from public schools in Paducah.

A long time Naval Reserve member, Williams lives at 5240 Old Benton Road. He and his wife, June, have a daughter, Lori Ann.

## Paypoints will close for Y-12 at portals

Y-12 employees on the hourly and weekly payrolls will receive their last pay checks at the portals this week.

Beginning July 11, employees who pick up their checks, will receive them through their supervisors.

All employees may bank by mail, or have their checks mailed to their homes, by filling out a form in Timekeeping, Building 9706-1. These forms authorize the Payroll Department to forward your check to the bank of your choice, or to your home, without charge.

## Ryan's paper takes ASCE Hydraulic prize

Patrick J. Ryan, Environmental Sciences Division at ORNL, has been selected as the recipient of the 1973 Karl Emil Hilgard Hydraulic Prize. Ryan was chosen for his paper, "Temperature Prediction in Stratified Reservoirs," which was published in the April, 1972, *Journal of the Hydraulics Division*, American Society of Civil Engineers. The prize will be presented to Ryan at the Society's annual meeting in October.

Ryan, who received the Ph.D. in civil engineering from Massachusetts Institute of Technology, joined the



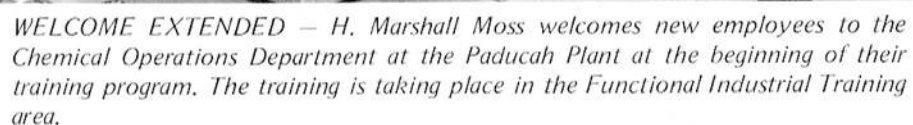
Ryan

ORNL staff in February of this year. He previously worked as a civil engineer at the Department of Works, Commonwealth of Australia. His present assignment includes studying heat dissipation from thermal power plants, behavior of reservoirs and cooling lakes, and remote sensing techniques.

The Hilgard Prize is awarded annually for the best paper on flowing water appearing in the Proceedings of the ASCE. W. C. Huber, Florida State University, and D.R.F. Harleman, Massachusetts Institute of Technology, co-authored the paper.

A native of Melbourne, Australia, Ryan is married and has three sons. The Ryans live in Norris.







# The Medicine Chest

(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning their health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," NUCLEAR DIVISION NEWS, Building 9704-2, Stop 20, or call the news editor in your plant, and give him your question on the telephone.)



By T. A. Lincoln, M.D.

**QUESTION:** "Could you tell me what causes 'sounds' and 'noises' in a person's ear, and what can be done about it?"

**ANSWER:** The presence of noises in the head is called tinnitus and there is not much that can be done about it. Since it is a common complaint, I plan to devote a full article to the subject as soon as I can obtain and review some of the recent references on this vexing symptom.

**QUESTION:** "What is 'tennis elbow'? Can it be cured, or even helped?"

**ANSWER:** Although called tennis elbow, in at least half the cases there is no definite history or a strain or bump. Since 30 or more days often pass after a strain before symptoms develop, many have forgotten about their injury. Sooner or later the patient notices one sore spot on the outside of his elbow. There is always more pain and often considerable weakness when he attempts to lift or grasp objects. Turning a stiff doorknob in a counterclockwise direction or lifting a heavy book off the table with the palm down, is almost impossible. The condition is a nonspecific inflammation of the structures in and around the elbow joint. Although painful and a terrible nuisance, it will usually eventually go away without treatment. Some physicians get good results by injecting a local anesthetic and one of the cortisone preparations.

## Thomason daughter takes honors at UT

Andrea Coleen Thomason has been initiated as a member of the University of Tennessee Mortar Board. Membership in the honor society is based on scholastic achievement as well as extra-curricular activities.



Miss Thomason

Miss Thomason is a music major, and a member of the University Singers, and the Usher Corps. She is the daughter of the A. J. Thomasons, Land Oak Lane, Concord. Her father is in the Finance and Budget Department of the General Accounting Division.

**QUESTION:** "How often should I take a tetanus shot?"

**ANSWER:** The basic adult immunization schedule against tetanus is a series of three doses given intramuscularly with the second dose four to six weeks after the first, and the third dose 6 months to one year after the second.

After completing the basic immunization, a booster is required only once every 10 years. If an individual receives a clean minor wound outdoors and he is uncertain whether he completed the basic series of 3 injections, he should go ahead and get a booster. If the basic series had been completed, a booster for such a wound would not be necessary unless it had been more than 10 years since the last dose. If the wound was more serious or had been contaminated with dirt, a booster may not be necessary if the last dose had been received within the past five years. Some physicians are more conservative and give boosters more frequently. Whenever there is any doubt, especially after an injury, it is better to go ahead and get a booster injection.

## ORNL's Inouye gets Viking mission pin

Henry Inouye, ORNL's Metals and Ceramics Division, has been presented a Viking Mission pin in recognition of his contributions to the Viking Mars Lander mission. The presentation was made by the Atomic Energy Commission's Space Nuclear Systems Division for Inouye's recommendations and analyses which lead to advancement of the prototype Pioneer radioisotopic thermoelectric power generators. The Viking mission is scheduled for launch in 1975.



Inouye

Inouye joined the ORNL staff in 1952. He holds degrees in metallurgy from the Colorado School of Mines and Massachusetts Institute of Technology. His work at ORNL involves alloy development, gas-metal corrosion and chemical kinetics.

Inouye is the author of many publications in the field of metallurgy, and is a member of the American Society for Metals.

The Inouye home is at 107 Colby Road, Oak Ridge.

## Patents granted

To Maurice H. Kunselman and Clyde H. Odom, ORNL, for "Apparatus for Leaching Core Material from Sheared Segments of Clad Nuclear Fuel Pins."



**CARBON CONFERENCE** — More than a dozen foreign countries were represented among the 361 attendees of the Eleventh Biennial Conference on Carbon which was held recently in Gatlinburg. The international meeting was sponsored jointly by the American Carbon Committee and Oak Ridge National Laboratory. From left are: V. Frolov, USSR; S. Orzeszko, Poland; A.S. Kotosonov, USSR; E. Golovina, USSR; R. Didchenko, Union Carbide, Ohio; Pat Viles, ORNL; J. Uebersfeld, France; W.P. Eatherly, ORNL, Conference Chairman; and V. Sosedov, USSR.

## Calendar of EVENTS

### TECHNICAL

July 10

Mathematics Division Seminar: "Eigenvalue Properties of Integral Operators with Nonnegative Kernels," Philip M. Anselone, Oregon State University. East Auditorium, Building 4500N, 10 a.m.

July 11

ORAU-ORNL Summer Research Participation and Training Program: "Management and Disposal of Wastes from the Nuclear Power Industry," J.O. Blomeke. East Auditorium, Building 4500N, 4 p.m.

July 12

Mathematics Division Seminar: "Newton's Method for Solving Nonlinear Problems," Philip M. Anselone, Oregon State University. East Auditorium, Building 4500N, 10 a.m.

July 18

Ecology and Analysis of Trace Contaminants Program: "Plant Levels of Heavy Metals in Crops Grown on Land

## Foreign travel

Clarence F. Barnett, Thermonuclear Division, was scheduled to visit the Soviet Academy of Science for three weeks beginning June 25. Lecturers will be given at the Ioffe Institute in Leningrad, Kharkov University and Atomic Energy Research Laboratory in Kharkov, Kurchatov Institute and Lebedev Institute in Moscow.

Barnett will also present a paper, "Production of Hydrogen Negative Ions by Dissociation of  $H^+_2$ ,  $H^+_3$ ,  $HD^+_2$  in Hydrogen Gas," at the Eighth International Conference on the Physics of Electronic and Atomic Collisions at Belgrade, Yugoslavia, July 16-20.

Treated with Digested Municipal Sludge," Robert L. Jones, University of Illinois. East Auditorium, Building 4500N, 10 a.m.

ORAU-ORNL Summer Research Participation and Training Program: "Progress in Controlled Thermonuclear Research," H. Postma. East Auditorium, Building 4500N, 4 p.m.



**RECEIVES GOLD WINGS** — Ensign Stephen R. Brust recently received his Navy "Wings of Gold" in ceremony at Ellyson Field, Pensacola, Fla. Ens. Brust is the son of Ray Brust, Paducah Gaseous Diffusion Plant, and Mrs. Brust, who is employed by the Atomic Energy Commission at their Paducah office. Shown at the ceremony are Cmdr. J.M. Bolton, Ens. Brust, Ray, Sherry and Thelma Brust. Sherry is the young officer's wife.



## EO coordinators meet at ORNL

A Workshop for Equal Opportunity Coordinators from AEC Research Laboratories was held June 25 and 26 at Oak Ridge National Laboratory.

This Workshop was one of a series, and followed the Fifth Annual AEC Research Laboratories' Affirmative Action Conference held in Albuquerque, N.M., earlier this year. The purpose of the workshop was to evaluate the EEO programs and prepare definitive statements on several areas of operation, and to plan future workshops and meetings which would be beneficial to the coordinators.

The program included a tour of the Training and Technology facilities at the Y-12 Plant.

Out-of-town attendees of the workshop included: Warren F. Cannon, National Accelerator Laboratory, Batavia, Ill.; Jean M. Davis, Los Alamos Scientific Laboratory, N.M.; Jim L. Ketcher, Stanford Linear Accelerator Center, San Jose,

Calif.; Karol Berscheid, Lawrence Livermore Laboratory, Dublin, Calif.; Ronald J. Santi, Ames Laboratory, Iowa State University; Herb Pitts, Sandia Laboratory, Albuquerque, N.M.; Willie A. Lacy, Lawrence Berkeley Laboratory, Calif.; and Conrado P. Gutierrez, Los Alamos Scientific Laboratory, N.M.

Carbide staff members and affirmative action representatives were invited to attend the workshop sessions. Local attendees included: C.R. Teeter and Phyllis Johnson, Y-12; Al G. Burris, Joyce Ferguson and Wayne McLaughlin, ORGDP; Brena Stevens, William B. Cottrell, Alan C. England, Floyd L. Culler and James A. Barker, ORNL.

The workshop was coordinated by Earl J. Nash, ORNL Affirmative Action Coordinator, and Charles A. Blake, Equal Opportunity Coordinator for the Nuclear Division. Nash served as general chairman and Blake was workshop recorder.



**EO WORKSHOP ATTENDEES** — Attending the Equal Opportunity Coordinators' Workshop held at ORNL recently were, front row from left, Herb Pitts, Warren Cannon, Jean Davis, Conrado Gutierrez and Charlie Blake. Back row, from left, Phyllis Johnson, Alan England, Brena Stevens, Bill Cottrell, Jim Barker, Clarence Teeter, Ronald Santi, Earl Nash, Joyce Ferguson, Karol Berscheid, Willie Lacy and Al Burris.

### COMPANY Service

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Y-12 PLANT  
30 YEARS

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Bible



Bissell

Four well-known Y-12ers mark 30-year anniversaries this month, putting hire-in dates back in the early days of the Manhattan Project.

Albert V. Bible, Receiving Department, is a native of Mohawk, Tenn. He was formerly with the Tennessee Valley Authority, and lives at 103 Ogontz Lane, Oak Ridge.

Alvin K. Bissell, a native of Knox County, was recently elected mayor of Oak Ridge for his seventh term. He worked with American Zinc Company and American Limestone Company, before coming to Y-12. He lives with his family at 105 Meadow Road, Oak Ridge.



May



Stanfill

George A. May, Fire and Guard Department, is a native of Sweetwater. He served in the U.S. Marine Corp from 1944 until 1946, and worked with the Aluminum Company of America and the American Textile Woolen Mills before coming to Y-12. He lives at 4322 Hickory Lane, Sweetwater.

Ralph L. Stanfill, Beta Two Chemistry, was born in Elk Valley, Tenn. He taught school in Campbell County before

moving to Oak Ridge. He and his family live at Route 20, Knoxville.

#### 25 YEARS

Emerson R. Rohrer, Leon T. Coleman, Rufus R. Deathridge, William M. Eads, William R. Carver, Joseph O. Loggins, and Fred C. Hancock.

#### 20 YEARS

Corbin A. Keck, Victor M. Hovis Jr., Ray N. Evans, Fred R. Hardin, Ernie Duncan, Laurence E. Brown, William L. Brenzenhafer, William H. Hickman, See Myers, William V. Blankenship, Thomas N. Breazeale Jr., Harold B. Milhorn and Charles S. Ivy.

## Bioengineering film produced by ORNLers

A new educational motion picture covering biological engineering research has been produced at Oak Ridge National Laboratory, and is now available for general use.

The film, "The Bioengineers," was written, directed, photographed and edited by Fleming Reeder, motion picture consultant to ORNL, and Edward Matney, formerly of the Information Division at ORNL.

The 16-mm color film has a running time of 14 minutes. It explores in a fast-paced, artistic style the new combination of biology and engineering at ORNL, with emphasis on the investigation of the human cell.

It explains how multi-disciplinary teams of scientists and engineers have combined their talents to produce new research and diagnostic equipment that will aid in the relief of suffering and the control of disease.

The film surveys the development at ORNL of high-speed liquid zonal centrifuges, other sophisticated machinery to analyze body fluids, and the development of a powerful scanning electron microscope designed to permit scientists to "see" individuals atoms in complex molecules.

Prints of the film have been stocked for free loan to the public in the AEC Film Library at Oak Ridge and in AEC offices in Tokyo, Brussels, the University of Alaska, University of Hawaii and the AEC's Puerto Rico Nuclear Center.

## Snead son accepted at Naval Academy

Another Carbide son has been appointed to the U.S. Naval Academy. Richard L. Snead, son of Richard S. Snead, General Accounting, graduated from Clinton High School June 1. At his graduation, the Navy officially presented him with the Academy certificate of accomplishment, signifying his appointment in the class of 1977.

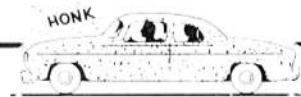


Snead

Snead rated in the top 10 percent of his class and was a member of the National Honor Society, Key Club, Pep Club, band, as well as serving as a member of the National Youth Leadership Council.

He played baseball, football and basketball, and served as captain of his high

## WANTED



#### ORNL

RIDERS or JOIN CAR POOL from Emory Road, Karns area, to either portal, 8 a.m. shift. R.K. Kirby, plant phone 3-6645, or home phone Powell 947-6677.

TWO CAR POOL MEMBERS from vicinity of Waddell, West Outer or Pennsylvania to East or North Portal, 8:15 shift. Tom Burnett, plant phone 3-6929 or Oak Ridge 483-1975; or Dick Reed, plant phone 3-1901 or Oak Ridge 483-3458.

RIDE from Garden Apartment area, Oak Ridge, to East Portal, either shift. R. Graetzer, plant phone 3-6400, or Oak Ridge 482-2919.

school golf team which won the district tournament.

He reports to the Academy this week.



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NUCLEAR DIVISION

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